#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011514 Address: 333 Burma Road **Date Inspected:** 16-Jan-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Chen Ying Xin No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

#### **BAY 10**

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% and randomly Visual Testing of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower Splice Plate. The weld designations reviewed are as follows.

 $ND1-A5002-19-1A/B \sim 32-1A/B$ ,  $SD1-A5002-37-1A/B \sim 40-1A/B$ . NDT Notification No: 005066

This QA Inspector observed the following work in progress:

**BAY 10** 

## Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 053869 perform Flux Core Arc

## WELDING INSPECTION REPORT

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Welding (FCAW) on North Tower lift 4, D/E corner joint. Joint identified as NSTL4-3B/L-2B, ZPMC QC Identified as Lia Zhong An. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-1G (1F)-FCM-Repair.

### Tower Trial Assembly:

This QA Inspector observed ZPMC qualified welding personnel identified as 070046, perform Flux Core Arc Welding (FCAW) on East Tower. Joint identified as ESD1-SA233-22, Skin B, ZPMC QC Identified as Qiu Wen Tiny. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 070478, perform Flux Core Arc Welding (FCAW) on East Tower. Joint identified as ESD1-SA296-30, Skin D, ZPMC QC Identified as Qiu Wen Tiny. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 070254, perform Flux Core Arc Welding (FCAW) on West Tower. Joint identified as WSD1-SA279-21, Skin B, ZPMC CWI Identified as Zhao Chen Sun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 068765, perform Flux Core Arc Welding (FCAW) on West Tower. Joint identified as WSD1-SA294-F/G-59, ZPMC CWI Identified as Zhao Chen Sun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 068864, perform Flux Core Arc Welding (FCAW) on West Tower. Joint identified as WSD1-SA295-B/E-25, ZPMC CWI Identified as Zhao Chen Sun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

#### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this projec

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Shailesh	Quality Assurance Inspector

**Reviewed By:** Hall,Steven QA Reviewer